§ 1068.410

(g) If you also do routine productionline testing with the selected engine family in the same time period, the test order will tell you what changes you might need to make in your production-line testing schedule.

§1068.410 How must I select and prepare my engines?

- (a) Selecting engines. Select engines as described in the test order. If you are unable to select test engines this way, you may ask us to approve an alternate plan, as long as you make the request before you start selecting engines.
- (b) Assembling engines. Produce and assemble test engines using your normal production and assembly process for that engine family.
- (1) Notify us directly if you make any change in your production, assembly, or quality control processes that might affect emissions between the time you receive the test order and the time you finish selecting test engines.
- (2) If you do not fully assemble engines at the specified location, we will describe in the test order how to select components to finish assembling the engines. Assemble these components onto the test engines using your documented assembly and quality control procedures.
- (c) *Modifying engines*. Once an engine is selected for testing, you may adjust, repair, prepare, or modify it or check its emissions only if one of the following is true:
- (1) You document the need for doing so in your procedures for assembling and inspecting all your production engines and make the action routine for all the engines in the engine family.
- (2) This subpart otherwise allows your action.
- (3) We approve your action in advance.
- (d) *Engine malfunction*. If an engine malfunction prevents further emission testing, ask us to approve your decision to either repair the engine or delete it from the test sequence.
- (e) Setting adjustable parameters. Before any test, we may adjust or require you to adjust any adjustable parameter to any setting within its physically adjustable range.

- (1) We may adjust or require you to adjust idle speed outside the physically adjustable range as needed until the engine has stabilized emission levels (see paragraph (f) of this section). We may ask you for information needed to establish an alternate minimum idle speed.
- (2) We may make or specify adjustments within the physically adjustable range by considering their effect on emission levels, as well as how likely it is someone will make such an adjustment with in-use engines.
- (f) Stabilizing emission levels. Before you test production-line engines, you may operate the engine to stabilize the emission levels. Using good engineering judgment, operate your engines in a way that represents the way production engines will be used. You may operate each engine for no more than the greater of two periods:
 - (1) 50 hours.
- (2) The number of hours you operated your emission-data engine for certifying the engine family (see 40 CFR part 1065, subpart E).
- (g) Damage during shipment. If shipping an engine to a remote facility for testing under a selective enforcement audit makes necessary an adjustment or repair, you must wait until after the initial emission test to do this work. We may waive this requirement if the test would be impossible or unsafe, or if it would permanently damage the engine. Report to us, in your written report under § 1068.450, all adjustments or repairs you make on test engines before each test.
- (h) Shipping engines. If you need to ship engines to another facility for testing, make sure the test engines arrive at the test facility within 24 hours after being selected. You may ask that we allow more time if you are unable to do this.
- (i) Retesting after invalid tests. You may retest an engine if you determine an emission test is invalid under the standard-setting part. Explain in your written report reasons for invalidating any test and the emission results from all tests. If you retest an engine and, within ten days after testing, ask to substitute results of the new tests for

the original ones, we will answer within ten days after we receive your information.

- (i) Retesting after invalid tests. You may retest an engine if you determine an emission test is invalid. Explain in your written report reasons for invalidating any test and the emission results from all tests. If you retest an engine and, within ten days after testing, ask to substitute results of the new tests for the original ones, we will answer within ten days after we receive your information.
- (j) Retesting after reaching a fail decision. You may retest your engines once a fail decision for the audit has been reached based on the first test on each engine under § 1068.420(c). You may test each engine up to a total of three times, but you must perform the same number of tests on each engine. You may further operate the engine to stabilize emission levels before testing, subject to the provisions of paragraph (f) of this section. We may approve retesting at other times if you send us a request with satisfactory justification.

[67 FR 68347, Nov. 8, 2002, as amended at 69 FR 39270, June 29, 2004; 70 FR 40516, July 13, 2005]

§ 1068.415 How do I test my engines?

- (a) Use the test procedures specified in the standard-setting part for showing that your engines meet emission standards. The test order will give further testing instructions.
- (b) If no test cells are available at a given facility, you may make alternate testing arrangements with our approval.
- (c) Test at least two engines in each 24-hour period (including void tests). However, if your projected U.S. nonroad engine sales within the engine family are less than 7,500 for the year, you may test a minimum of one engine per 24-hour period. If you request and justify it, we may approve a lower testing rate.
- (d) Accumulate service on test engines at a minimum rate of 6 hours per engine during each 24-hour period. The first 24-hour period for service accumulation begins when you finish preparing an engine for testing. The minimum service accumulation rate does not apply on weekends or holidays. You

may ask us to approve a lower service accumulation rate. Plan your service accumulation to allow testing at the rate specified in paragraph (c) of this section. Select engine operation for accumulating operating hours on your test engines to represent normal in-use engine operation for the engine family.

(e) Test engines in the same order you select them.

[67 FR 68347, Nov. 8, 2002, as amended at 69 FR 39270, June 29, 2004]

§ 1068.420 How do I know when my engine family fails an SEA?

- (a) A failed engine is one whose final deteriorated test results exceed an applicable emission standard for any regulated pollutant.
- (b) Continue testing engines until you reach a pass decision for all pollutants or a fail decision for one pollutant.
- (c) You reach a pass decision for the SEA requirements when the number of failed engines is less than or equal to the pass decision number in Appendix A to this subpart for the total number of engines tested. You reach a fail decision for the SEA requirements when the number of failed engines is greater than or equal to the fail decision number in Appendix A to this subpart for the total number of engines you test. An acceptable quality level of 40 percent is the basis for the pass or fail decision
- (d) Consider test results in the same order as the engine testing sequence.
- (e) If you reach a pass decision for one pollutant, but need to continue testing for another pollutant, we will disregard these later test results for the pollutant with the pass decision.
- (f) Appendix A to this subpart lists multiple sampling plans. Use the sampling plan for the projected sales volume you reported in your application for the audited engine family.
- (g) We may choose to stop testing after any number of tests.
- (h) If we test some of your engines in addition to your own testing, we may decide not to include your test results as official data for those engines if there is substantial disagreement between your testing and our testing. We will reinstate your data as valid if you